

# “The needle’s through the lesion!”: A reliable sign when considering concordance between imaging and histology?

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## INTRODUCTION

Ultrasound-guided core needle biopsy (UG-CNB) is widely used for diagnosing breast pathologies. European guidelines emphasise the importance of documenting needle placement (NP) through the lesion to maximise sample reliability<sup>1</sup>. This study explores the association of NP documentation and a concordant sample on histology.

## METHODS

MDT outcomes were retrospectively reviewed from August 2018 to August 2019 at a large breast imaging unit. Imaging and histology for patients requiring a repeat UG-CNB, where there was concern about discordance between histology and imaging, were reviewed using the Cerner© Patient Administration System and Carestream© PACS.

## RESULTS

Of 1812 patients who had a biopsy reviewed at MDT, 51 patients required repeat UG-CNB and had available histology reports. This consisted of 43 (84%) breast, 6 (12%) axilla and 2 (4%) breast and axilla biopsies.

8 (16%) patients had no documentation of NP through the lesion on initial biopsy.

Of patients with initial NP documentation, 36 (84%) had concordant diagnoses on initial and repeat biopsy (Figure 1).

In 16% of patients, the diagnosis changed, with an upgrade to a malignant diagnosis in 9% of cases.

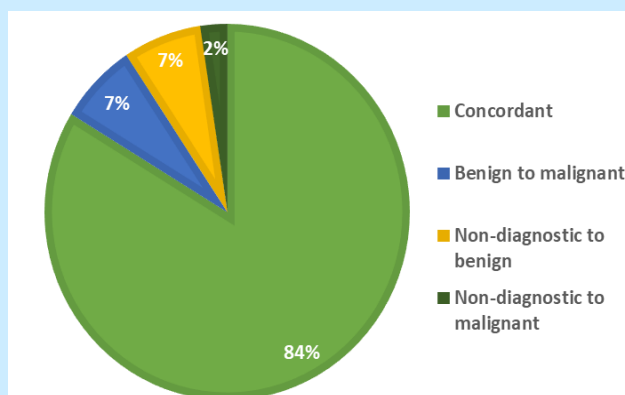


Figure 1- Initial and repeat biopsy outcomes (n=43)

## CONCLUSIONS

The diagnosis in a considerable proportion of patients changed on repeat biopsy, despite initial imaging evidence of the biopsy needle through the lesion. There was an upgrade to a malignant diagnosis in over half of the cases where the diagnosis changed. This study suggests that when judging if a repeat biopsy is required at MDT, caution should be taken not to place too much weighting on imaging documentation of a needle through a lesion.

## REFERENCES

[1] Wallis M, Tarvidon A, Helbich T, Schreer I. Guidelines from the European Society of Breast Imaging for diagnostic interventional breast procedures. *Eur Radiol* 17, 581–588 (2007). <https://doi.org/10.1007/s00330-006-0408-x>